

Policy Brief on Inclusion of Water, Sanitation and Hygiene in Zambia's Nationally Determined Contributions

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Abstract

The Paris Agreement aims to reduce Greenhouse Gas (GHG) emissions, thus contributing to sustainable development goals through building climate-resilient communities and industries. Water is the primary medium through which climate change influences the earth's ecosystem and thus the livelihood and well-being of societies. Extreme weather conditions impact many sectors such as health, tourism, agriculture, and industry where water plays a key role. The climate effect is first and foremost through water systems as highlighted by the World Economic Forum (2016) Global Risks Report. Hence the Water, Sanitation, and Hygiene (WASH) sector plays a pivotal role in addressing climate change.

In the last decade, Zambia has experienced the impacts of climate change in the form of extreme weather conditions and rising temperatures. In light of this, the Zambian government developed NDCs in accordance with the Paris agreement that aims to reduce Greenhouse Gas (GHG) emissions and develop sustainable climate-resilient communities and industries. The impacts of climate change are felt through its influence on water. WASH is not only affected by climate change, but also a contributing factor to GHG emissions. Therefore, the WASH sector should play a pivotal role in contributing to the climate change targets.

There are gaps among state and non-state actors and with affected communities in acknowledging the critical role of WASH in making real the NDC that need bridging. These include awareness and knowledge of WASH in contributing to NDC; the need to go beyond water to include sanitation and hygiene elements in the NDCs as holistic approach; inclusive participation of civil society and other non-state actors in addressing the gaps; integration of sectors and programmes in the NDCs; and enhanced governance and accountability mechanisms.

Key Policy Insights

1. Given the prominence of water and its co-relationship with climate change mitigation and adaptation, the inclusion of holistic WASH in NDCs can no longer be ignored in the pursuit of attaining the climate change targets.
2. There is currently a focus on climate change impacts on water resources. Very little consideration is given to Sanitation and Hygiene which contribute to GHG emissions, that should be considered as mitigation measures.
3. Zambia's NDCs sets a compound figure for GHG targets; there is a need for specific sector targets, including the WASH sector
4. A sector-specific budget for WASH mitigation components is critical but yet to be established.
5. Mitigation components should deliberately consider the issue of waste management by including liquid waste, while also amplifying the recognition of wetlands as carbon sinks in the NDCs.

Keywords: WASH, Zambia, Sanitation, Hygiene, NDC

1. Introduction

Water is the primary medium through which climate change influences the earth's ecosystem and thus the livelihood and well-being of societies. Extreme weather conditions impact many sectors such as health, tourism, agriculture and industry where water plays a key role. It's crucial to note that the effects of climate change would be felt, first and foremost through water systems as reported by the World Economic Forum (2016) *Global Risks Report*.

Zambia is a landlocked country situated in southern Africa with a land area of about 752,618 km². It has an estimated population of about 18million, an estimated population growth rate of 3.1%, with 64.4% of the population living below the poverty line (Zambia Statistics Agency [ZSA], 2020). Zambia is privileged on water endowment as it holds approximately 40% of freshwater within the Zambezi basin. However, the *Zambia Demographic Health Survey* conducted by Zambia Statistics Agency, Ministry of Health (MOH) Zambia, and ICF reported that the water, sanitation, and hygiene access coverage is still very low (2019). The survey indicates that 49% of people living in rural areas still do not have access to basic water, sanitation hygiene facilities. Zambia's 2030 Vision aims to ensure safe and adequate access to water for all 2030 by improving access to appropriate environmentally friendly sanitation; attaining 80 per cent access to clean water supply to all by 2015 and 100 per cent by 2030; attaining 68 per cent access to sanitation to all by 2015 and 90 per cent by 2030; and through fully integrated and sustainable water resource management (Ministry of National Development Planning, 2006).

Zambia has over the last ten years' experienced serious weather extremities ranging from droughts, to flash floods and elevated temperatures which have had serious consequences, especially for vulnerable populations (African Development Bank Group [AfDB], 2018). The Zambian Government approved its first coordinated response to climate change, the National Adaptation Programme of Action (NAPA) in 2007, which was followed by the National Climate Response Strategy (NCCR) of 2010. Subsequently, the country developed Intended Nationally Determined Contribution (INDC) in 2015, after which Zambia signed the Paris agreement and the INDC changed to the NDC. The country's National Policy on Climate Change was developed in 2016. The NDCs focus on the delivery of direct development benefits and sustainable growth of the economy in sectoral areas such as Agriculture, Forestry and Other Land Use, energy, protection and conservation of water and enhanced capacity building, research, technology transfer and finance for adaptation and mitigation to combat climate change at country level (Government of the Republic of Zambia [GRZ], 2015).

As required the country is expected to prepare, communicate, and maintain successive NDCs that it intends to achieve every five years. Zambia commenced the review process of the 2015 NDC in 2020, granting the country the opportunity to reflect on the hurried NDC document of 2015 and develop a stronger, broader, and more integrated version that addresses the climate issues of the country with a better accountability mechanism to track progress. Zambia recently submitted an enhanced NDC placeholder of 2020 which is currently undergoing review (GRZ, 2020).

This Policy Brief is a result of consultations with government, civil society organisations and other stakeholders to ascertain the adequacy in the inclusion of water, sanitation and hygiene-related priorities in the current INDCs, gaps thereof, and opportunity for substantive inclusion in the final submission of the Zambia NDCs.

2. Methods

This rapid assessment study utilized qualitative study methods including literature/desk review of selected documents related to relevant policies, legal frameworks, and programmes. Additionally, experts' insights were gathered through scheduled bilateral meetings with the pre-selected key stakeholders using guided interview questions. The objectives of these meetings were to understand the governance arrangement for mandated and supporting institutions especially regarding WASH and NDCs. A Civil Society Organization participatory engagement workshop was convened to further discuss identified gaps, provide additional input and validate preliminary insights and findings from the consultations. An enabling environment matrix was used as one tool to further interrogate WASH inclusion in the NDC and other climate and national development policies and programmes in addition to identifying already existing opportunities for catalyzing inclusion within the NDC. The other tool used was a mind map to further understand WASH and climate change linkages, and to cross-examine the extent to which WASH climate implications have been considered in the enhanced NDC of 2020.

3. Results

The rapid assessment revealed and identified existing facts, gaps, and opportunities in relation to the inclusion of Water, Sanitation and Hygiene in NDCs.

Water, Sanitation and Hygiene (WASH) has been mirrored in the 2015 and 2020 NDCs, both under the mitigation and the adaptation components, to set the country on the trajectory of sustainable development while addressing the challenge of climate change. Both components are to be implemented at an estimated US\$ 50 billion by the year 2030; out of this, USD 35 billion is expected to come from external sources while \$15 billion will be mobilized from domestic sources (GRZ, 2015). However, a breakdown of the budget estimate for interventions in different sectors has not been provided. Though a provisional estimated budget for mitigation components has been determined, a sector-specific budget for WASH has not been established.

The current NDCs contain set mitigation objectives to reduce national emissions and contribute towards a global goal of limiting warming to 1.5 to 2 degrees C. As reflected in the 2015 and 2020 NDC placeholder, the targets for emissions, including the conditional pledge, have been maintained, namely, to reduce Greenhouse Gas (GHG) emissions by 25% by 2030 against the base year of 2010 under the Business as Usual (BAU) scenario with limited international support or by 47% (38,000 Gg CO₂ eq.) with substantial international support.

The adaptation component sets the framework by which Zambia will increase the ability to adapt to adverse impacts of climate change, foster climate resilience, and contribute to the global long-term goal of resilient sustainable development that enhances equity and social justice. The key socio-economic sectors identified as most vulnerable to climate change impacts include agriculture, water, forestry, energy, wildlife, infrastructure, and health. The adaptation has three strategic objective programmes with thirteen priority action areas that echo water as a key issue to be addressed.

From the analysis of five key enablers (Note 1) that should facilitate achievement of WASH-related goals and benefits so as to increase climate resilience, it is evident that while the enabling environment exists in these areas, there are perceptions of gaps in the inadequacy of commitment to act on these issues. The NDC review process offers the opportunity to review the blockages preventing action and develop strategies and accountability mechanisms to implement agreed plans of action.

4. Discussion

Water is identified as a key socio-economic sector most vulnerable to climate change impacts. As result, the National Adaptation Framework considers water in totality, but there is need to consider sanitation and hygiene matters. Although WASH is seen by the government as an integral component of climate change adaptation and response action within the framework of NDCs, it needs to go further in promoting holistic WASH as a package in adaptation by including Sanitation and Hygiene components as specific thematic areas.

WASH sector development and contextual aspirations and priorities were acknowledged when joining the Paris Agreement but are not adequately aligned. Stronger coordination and synergies between WASH sector mandated institutions and Climate mandated institutions is required for coherence in programming to achieve the NDCs.

GHG targets have been established as a compound figure, and there is no established disaggregated baseline and emissions reduction target specifically for the WASH sector (AfDB, 2018b).

Water and Sanitation have been sighted as strategic sectors to contribute to CO₂ reduction in mitigation-based interventions. However, the WASH sector includes High CO₂ generating activities especially with the inclusion of liquid waste. There is a need to establish baseline technology needs specific to the sector.

An accountability framework for local resource acquisition and utilization is needed as the Conditionality of the pledge in realizing the set targets for the country needs to be clarified and further contextualized by sector, especially that which speaks to the 25% locally mobilized resource acquisition by sector.

Moving forward the following recommendations are proposed in order to address identified gaps to enhance inclusion of WASH in NDC:

- I. There is need for the government to clearly articulate and document the review process to ensure an all-inclusive approach for meaningful participation by all stakeholders in all processes regarding the NDCs.
- II. It is crucial to address the gaps on knowledge and capacity development needs of stakeholders at the individual and institutional level, for better coordination and synergies, institutional capacity for processes such as planning, resource mobilization, implementation, monitoring of programs and processes around the NDC. Mapping and stock taking of sector related interventions, innovations, including resource contributions targeted at addressing climate change goals, would contribute to bridging the knowledge gaps as well as enable non-state actors to make meaningful contribution to the NDC.

- III. NDC Budget related to WASH components and WASH investment should be divided into the different mitigation /adaptation components and each prioritised segment of the sector should have a costed programme.
- IV. Mitigation components should deliberately consider the issue of waste management by including liquid waste, while also amplifying the recognition of wetlands as carbon sinks in the NDCs.
- V. Governance and institutional arrangements should be clearly spelt out to address the mismatch in sector vision and targets and how they support and prioritize areas of focus in NDCs for mitigation and adaptation.
- VI. The need for transparent communication and disclosure of NDC related data and reports should be addressed by ensuring communication and feedback mechanisms are in place to facilitate corrective actions from respective mandated institutions. Information and data availability will be crucial in enhancing public and stakeholder awareness and education, as well as support civil society advocacy initiatives.
- VII. Research should be further undertaken by a multi-disciplinary team in emerging topics critical for mitigation and adaption options given the ever-growing population and increase in basic service demands such as water, sanitation, and hygiene.

5. Conclusion

It is clear that the WASH sector has not been adequately covered in the current NDC and other climate-related policies, despite having identified it as a critical issue in the NDCs. Multiple mentions of water are made in almost all strategic objectives and the frequency with which it is mentioned in the NDC especially in the adaptation component is encouraging. However, the integration and inclusion aspects are not deliberately and adequately addressed. Mitigation components should deliberately consider the issue of waste management by including liquid waste, while also amplifying the recognition of wetlands as carbon sinks in the NDCs. These serve as entry points for strengthening and deepening WASH not only in the NDCs and but in other climate-related policies and programmes given that the implementation framework is yet to be developed. In terms of the enabling environment, it is more than clear from the perspectives of the participants in the study conducted that achieving WASH objectives would be supported by strengthening the enablers, with focus on ensuring inclusive evidence-based policy making, intervention planning, resource mobilisation, budgeting, capacity building, and robust monitoring, evaluation, and strengthening accountability processes to demonstrate progress and impact.

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Notes

Note 1. Policy and planning, Budget and Expenditure, Monitoring and Evaluation, Implementation arrangement, Capacity development.

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